

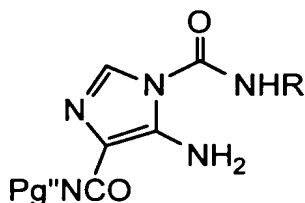
CLAIMS:

1. A process for the preparation of a compound of the formula:



wherein R is an alkyl group having from 1 to 6 carbon atoms, which

- (a) diazotizing a compound of the formula:



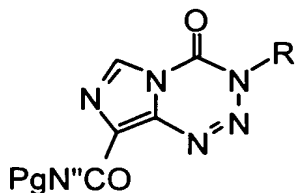
II,

wherein R is as defined above;

and Pg'' is a divalent protecting group that is readily removable by hydrolysis or hydrogenolysis; or two monovalent protecting groups Pg that are readily removable by hydrolysis or hydrogenolysis; or a bulky monovalent protecting group Pg that is readily removable by hydrolysis or hydrogenolysis, together with a hydrogen atom;

and thereafter

- (b) hydrolyzing the resulting compound of the formula:



III.

2. A process as claimed in Claim 1 wherein R is a straight-chain alkyl group having from 1 to 4 carbon atoms.
3. A process as claimed in Claim 1 wherein R is a methyl group.

4. A process as claimed in Claim 3 wherein Pg" is a monovalent protecting group together with a hydrogen atom.

5. A process as claimed in Claim 4 wherein the monovalent protecting group is a 1,1-dimethylethyl group.

6. A process as claimed in Claim 5 wherein step (a) is carried out in solution in an aqueous organic acid with a source of nitrous acid.

7. A process as claimed in Claim 6 wherein the organic acid is acetic acid and the source of nitrous acid is inorganic.

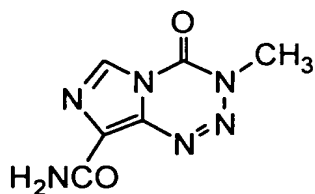
8. A process as claimed in Claim 7 wherein the source of nitrous acid is sodium nitrite.

9. A process as claimed in Claim 8 wherein the reaction is carried out in the presence of LiCl.

10. A process as claimed in Claim 5 wherein step (b) is carried out by hydrolysis with a mineral acid.

11. A process as claimed in Claim 10 wherein the mineral acid is concentrated sulfuric acid.

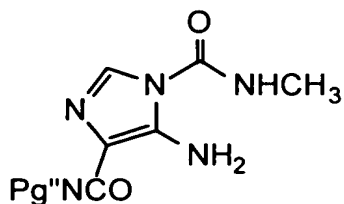
12. A process as claimed in Claim 1 for the preparation of Temozolomide having the formula:



I,

which comprises

(a) diazotizing a compound of the formula:

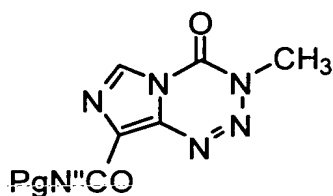


II,

wherein Pg" is a divalent protecting group that is readily removable by hydrolysis or hydrogenolysis; or two monovalent protecting groups Pg that are readily removable by hydrolysis or hydrogenolysis; or a bulky monovalent protecting group Pg that is readily removable by hydrolysis or hydrogenolysis, together with a hydrogen atom;

and thereafter

(b) subjecting the resulting compound of the formula:



III,

wherein Pg" is as defined above, to hydrolysis or hydrogenolysis.

13. A process as claimed in claim 12 wherein the protecting group Pg" is a 1,1-dimethylethyl group together with a hydrogen atom, the diazotization is effected in solution in acetic acid with sodium nitrite and in the presence of LiCl;

and step (b) is carried out by hydrolysis with concentrated sulfuric acid.

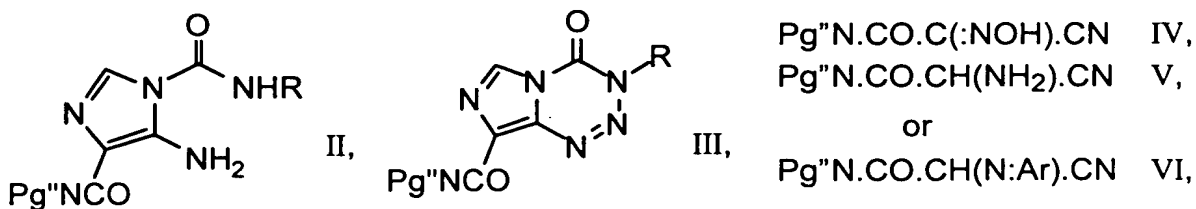
14. A process as claimed in claim 1 wherein the compound of the formula II is prepared by reaction of a compound of the formula Pg"N.CO.CH(NH₂).CN (V) (wherein Pg" is a protecting group as defined in claim 1) with methyl[[(methyl-amino)carbonyl]amino]methylene]urea or with N-methylurea and an orthoformate in an inert organic solvent.

15. A process as claimed in claim 14 wherein the compound of the formula V is prepared by hydrolysis of a compound of the formula Pg"N.CO.CH(N:Ar).CN (VI) (wherein Pg is as defined in claim 14 and Ar is an arylmethylene group) with mild acid.

16. A process as claimed in claim 15 wherein Pg is a 1,1-dimethylethyl group together with a hydrogen atom, and Ar is a diphenylmethylene group.

17. A process as claimed in claim 15 wherein the compound of the formula VI wherein Pg is a 1,1-dimethylethyl group together with a hydrogen atom and Ar is a diphenylmethylene group is prepared by condensation of [(diphenylmethylene)amino]acetonitrile with 1,1-dimethylethylisocyanate.

18. A compound of the formula:

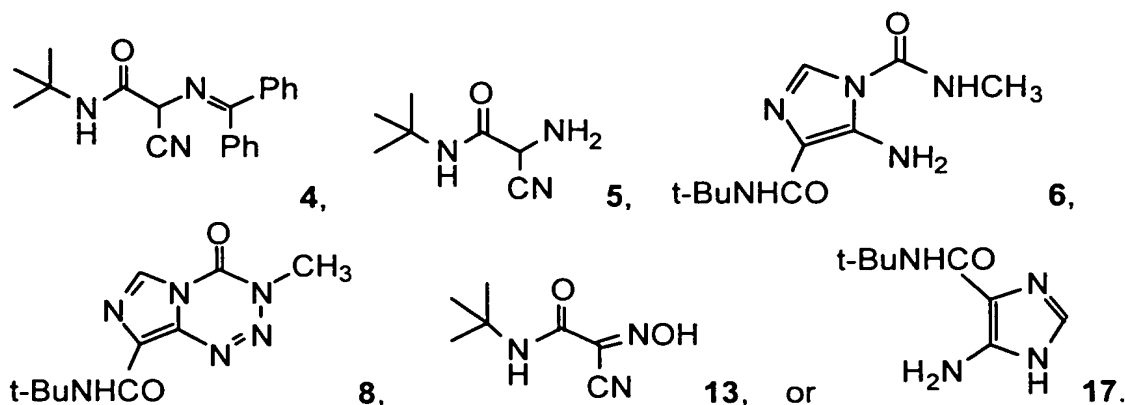


wherein Pg'' is a protecting group that is readily removable by hydrolysis as defined in claim 1, Ar is an arylmethylene group, and R is an alkyl group having from 1 to 6 carbon atoms;

5 together with the salts thereof.

19. A compound as claimed in Claim 18 wherein Pg is a 1,1-dimethylethyl group together with a hydrogen atom, Ar is a diphenylmethylene group, and R is an alkyl group having from 1 to 4 carbon atoms.

20. A compound as claimed in Claim 18 having the formula:



21. A process for the preparation of a compound having the formula III set forth in Claim 1, which comprises diazotizing a compound of the formula II set forth in Claim 1.

22. A process for the preparation of a compound having the formula II set forth in Claim 1, which comprises reacting a compound of the formula $\text{Pg}''\text{N.CO.CH(NH}_2\text{).CN}$ (V) with a compound of the formula $\text{R.NH.CO.NH.CH:N.CO.NH.R}$ or with an N-R-urea and an orthoformate in an inert organic solvent (wherein Pg'' is a protecting group as defined in claim 1 and R is as defined in Claim 1).

23. A process as claimed in Claim 22, which comprises reacting a compound of the formula $t\text{-BuNH.CO.CH(NH}_2\text{).CN}$ with methyl[[[(methylamino)carbonyl]-amino]methylene]urea or with N-methylurea and an orthoformate in an inert organic solvent.

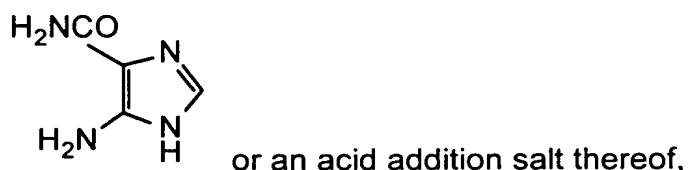
5 24. A process for the preparation of a compound having the formula $\text{Pg}''\text{N.CO.CH(NH}_2\text{).CN}$ (V), which comprises hydrolyzing a compound of the formula $\text{Pg}''\text{N.CO.CH(N:Ar).CN}$ (VI) (wherein Pg'' is a protecting group that is readily removable by hydrolysis as defined in claim 1, and Ar is an arylmethylene group) with mild acid.

10 25. A process for the preparation of a compound having the formula VI set forth in Claim 18 wherein Pg is a 1,1-dimethylethyl group and Ar is a diphenylmethylene group, which comprises the condensation of [(diphenylmethylene)amino]acetonitrile with 1,1-dimethylethylisocyanate.

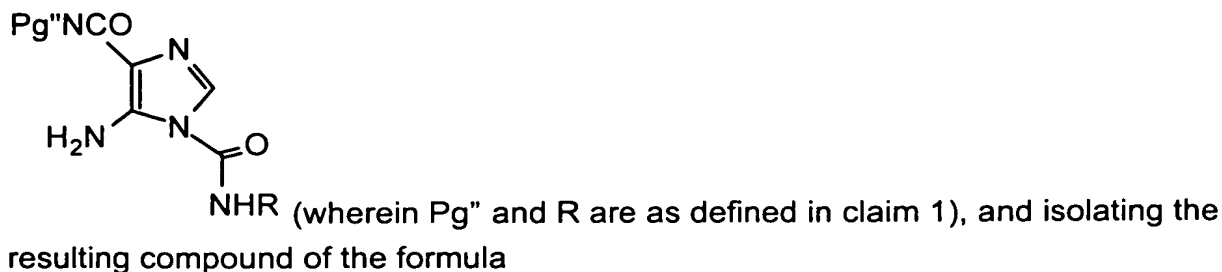
15 26. The acid addition salts of the compounds of the formulae 4, 5, 6, 8, and 17 defined in claim 20.

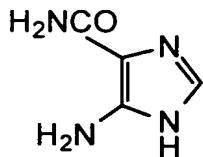
27. The salts with bases of the compound of the formula 13 defined in claim 20.

28. A process for the preparation of the compound of the formula



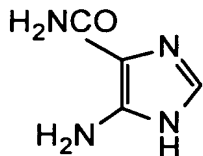
20 which comprises hydrolyzing, or hydrogenolyzing and hydrolyzing, a compound of the formula





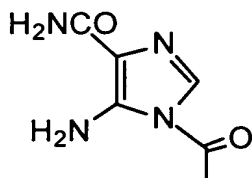
or an acid addition salt thereof.

29. A process for the preparation of a compound of the formula



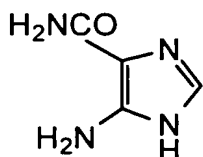
or an acid addition salt thereof,

which comprises condensing a compound of the formula $\text{H}_2\text{N}.\text{CO}.\text{CH}(\text{NH}_2).\text{CN}$ with
 a compound of the formula $\text{R}.\text{NH}.\text{CO}.\text{NH}.\text{CH}:\text{N}.\text{CO}.\text{NH}.\text{R}$ or with an N-R-urea and
 an orthoformate in an inert organic solvent (wherein R is as defined in Claim 1),
 hydrolyzing the resulting compound of the formula



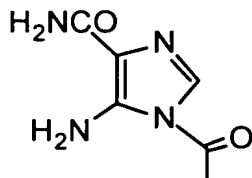
NHR (wherein R is as defined in Claim 1), and isolating the resulting

compound of the formula



or an acid addition salt thereof.

30. A process for the preparation of a compound of the formula



NHR wherein R is as defined in Claim 1,

which comprises condensing a compound of the formula $\text{H}_2\text{N}.\text{CO}.\text{CH}(\text{NH}_2).\text{CN}$ with
 a compound of the formula $\text{R}.\text{NH}.\text{CO}.\text{NH}.\text{CH}:\text{N}.\text{CO}.\text{NH}.\text{R}$ or with an N-R-urea and
 an orthoformate in an inert organic solvent (wherein R is as defined in Claim 1).